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10/029,172	12/28/2001	Paul Thomas Watson	BS01-326	4609

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EXAMINER

HOSSAIN, FARZANA E

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/029,172

Applicant(s)

WATSON ET AL.

Examiner

Farzana E. Hossain

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This office action is in response to communications filed 08-04-06. Claims 1, 5, 13, and 18 are amended. Claims 2-4, 6, 19, 20 are previously presented. Claims 8-12, 14-17 is original.
2. Claims 18-20 have incorrect headings of "New." Claim 18 should have headings of "currently amended" and Claims 19, 20 should have headings of "previously presented."

Response to Arguments

3. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Drawings

4. The drawings should be properly labeled or detailed.

The drawings are objected to under 37 CFR 1.83(a) because they fail to show Figure 1, 102, 104, 114, 106, 112, Figure 2, 220, 218 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to

avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claim 18 is objected to because of the following informalities:

The examiner suggests, "communicating" to be "communications."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1, 7 and 13:

The specification does not disclose a set top box comprising a database in the set top box, which stores configuration information. The applicant points to paragraphs 0042-0043 in the specification. The Applicant's specification clearly discloses that the resource information is retrieved for the STB and the information is compared with information stored at the database (paragraph 0044). The specification does not disclose a set top box comprising a processor comparing the resource information to the configuration information nor does it disclose that the set top box receives the resource information describing a number of disk drives and capacity of each disk drive as the set top box has a remote resource manager or processor which determines the number and capacity (paragraph 0042). Claim 7 and 13 are very similar to Claim 1, except a resource manager performs the functions of the processor in Claim 1.

The specification does not distinguish between a resource manager/processor and remote resource manager, however the current claims (especially 6, 15-17) further comprises a remote resource manager.

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Claim 2:

The specification discloses that the service provider causes operating instructions to be communicated to the STB (paragraphs 0047-0048) not the processor of the STB.

Claim 6:

The specification discloses the service provider receiving resource information for a remote resource manager operating in the STB (paragraph 0042-0043) not disclose the STB's processor receiving resource information for a remote resource manager operating in the STB.

The Examiner respectfully asks the applicant to point clearly to all sections in the specification that correspond to all new limitations and to verify the limitations with previously claimed limitations.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-3, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Safadi et al (US 6,256,393 and hereafter referred to as "Safadi") in view of Nissimov et al (US 5,327,549 and hereafter referred to as "Nissimov").

Regarding Claim 1, Safadi discloses a set top box or terminal (STB) (Figure 1, 350), comprising a port receiving resource information associated with the STB including BIOS (Figure 3, Figure 2, 50, Column 8, lines 58-67, Column 9, lines 1-5); the STB having access to pre-calculated and protected values, and a processor or secure processor comparing resource information to the configuration information and when the resource information differs from the configuration information detecting unauthorized modification to the STB (Column 8, lines 58-67, Column 9, lines 1-5). Safadi does not explicitly disclose resource information describing a number of disk drives and a capacity of each disk drive, a database in the STB storing configuration information. Nissimov discloses resource information describing disk drives or hard disks including the number and capacity of the disk drives (Column 4, lines 35-65); a database or BIOS ROM with drive parameters storing configuration information (Column 4, lines 35-65) and to modify the BIOS in order to use the entire storage capacity of a disk drive (Column 5, lines 30-47). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Safadi to include that the resource information or BIOS information describes disk drives or hard disks including the number and capacity of the disk drives (Column 4, lines 35-65); a database or BIOS ROM with drive parameters storing configuration information for the STB (Column 4, lines 35-65) as taught by Nissimov in order to determine the

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configuration of the system and to determine a way to not waste some of the storage capacity (Column 4, lines 63-64) as disclosed by Nissimov.

Regarding Claims 2 and 3, Safadi and Nissimov disclose all the limitations of Claim 1. Safadi discloses the processor causes operating instructions to be communicated to the STB as the processor performs the comparison and then sends the status to the MSO/headend to communicate operating instructions to the STB (Column 9, lines 53-65).

Regarding Claim 6, Safadi and Nissimov disclose all the limitations of Claim 1. Safadi discloses that the secure processor receives resource information from a user processor or remote resource manager operating in the STB (Column 9, lines 31-52).

10. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Safadi in view of Nissimov as applied to claim 1 above, and further in view of Coss et al (US 6,170,012 and hereafter referred to as "Coss").

Regarding Claim 4, Safadi and Nissimov disclose all the limitations of Claim 1. Safadi discloses receiving resource information (Figure 2, Figure 3). Safadi and Nissimov are silent on a firewall. Coss discloses a user site connected to the Internet via a firewall processor (Figure 2, 211). Coss discloses that a firewall can be resident in a STB (Column 2, lines 54-57, Column 10, lines 20-24). Coss discloses that the user in communication with the Internet (Column 10, lines 25-27), which would include that the STB interfaces to the Internet or necessarily includes a port. It is necessarily included that the firewall resident in the STB to receive communications from the port.

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Coss discloses that the firewall is capable of filtering or analyzing information received from the Internet (Figure 4, Column 5, lines 36-50). Therefore, it would have been obvious at the time the invention was made to Shintani to include a firewall in communication (Column 2, lines 54-57, Column 10, lines 20-24) and to analyze received information (Column 5, lines 36-50) as taught by Coss in order to facilitate parental control of Internet of video access in the home (Column 10, lines 25-27) as disclosed by Coss.

Regarding Claim 5, Safadi, Nissimov and Coss disclose all the limitations of Claim 4. Coss disclose the firewall is logically between the port and other components associated with the STB (Figure 1, 111, 113, 114) as the firewall is resident in the STB to filter received communications (Column 2, lines 54-57, Column 10, lines 20-24 Column 5, lines 36-50).

11. Claims 7-10, 12, 13-15, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani et al (US 2002/0095687 and hereafter referred to as "Shintani") in view of Nissimov, Safadi, and Coss et al (US 6,170,012 and hereafter referred to as "Coss").

Regarding Claims 7 and 13, Shintani discloses a set top box (STB) (Figure 1, 22) comprising: a first port or a coaxial cable is connected to a cable connector (Pages 1-2, paragraph 0016, Figure 1, 20, 22) or any transmission medium disclosed such as satellite communication system would necessarily include a port or place of access to a device which interfaces with the STB (Pages 1-2, paragraph 0016, Figure 1, 20, 22).

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Microsoft's Computer Dictionary (4th edition) defines port as an interface through which data is transferred between a computer and other device, a network or a direct connection to another computer. Shintani discloses the STB can interface with a second network such as DSL to connect to Internet, which necessarily includes a second port (Page 2, paragraph 0021) and receiving information from the second communication network (Page 2, paragraph 0021). Shintani discloses a tuner (Figure 2, 104) in communication with the first communications network (Figure 2) and capable of selecting a program or which receives a video signal from cable or satellite sources necessarily tunes to a program selected by a user (Page 1-3, paragraph 0016, paragraph 0023) and at least one disk drive capable of storing program information (Page 2, paragraph 0018). Shintani is silent on a second port capable of receiving resource information from the second communications network, a resource manager storing the resource information associated with the STB describing a number of disk drives and a capacity of each disk drive, the resource manager comparing the resource information to configuration information and when the resource information differs from the configuration information, the resource manager detects unauthorized modification to the STB and firewall which is in communications with a second port and the firewall capable of receiving communications with a second port and capable of filtering the information received from the second communications network.

Nissimov discloses information for disk drives or hard disks including the number and capacity of the disk drives are stored in the BIOS ROM (Column 4, lines 35-65) and to modify the BIOS in order to use the entire storage capacity of a disk drive (Column 5,

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lines 30-47). Safadi discloses a STB (Figure 1, 350) receiving a software object (Figure 3, 130, Figure 2, 50) and the secure processor or resource manager storing the resource information including BIOS (Column 8, lines 58-67, Column 9, lines 1-5), the secure processor or resource manager comparing the resource information including BIOS information to configuration information (Column 31-35), the secure processor detects unauthorized modifications to the STB (column 9, lines 53-65). Coss discloses a user site connected to the Internet via a firewall processor (Figure 2, 211). Coss discloses that a firewall can be resident in a STB (Column 2, lines 54-57, Column 10, lines 20-24). Coss discloses that the user in communication with the Internet (Column 10, lines 25-27), which would include that the STB interfaces to the Internet or necessarily includes a port. It is necessarily included that the firewall resident in the STB to receive communications from the port. Coss discloses that the firewall is capable of filtering information received from the Internet (Figure 4, Column 5, lines 36-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shintani to include storing resource information or the BIOS describing the number and capacity of disk drive or parameters of disk drives (Column 4, lines 35-64) as taught by Nissimov in order to determine the configuration of the system and to determine a way to not waste some of the storage capacity (Column 4, lines 63-64) as disclosed by Nissimov. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shintani discloses a STB (Figure 1, 350) receiving a software object (Figure 3,

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130, Figure 2, 50) and the secure processor or resource manager storing the resource information including BIOS (Column 8, lines 58-67, Column 9, lines 1-5), the secure processor or resource manager comparing the resource information including BIOS information to configuration information (Column 31-35), the secure processor detects unauthorized modifications to the STB (column 9, lines 53-65) as taught by Safadi in order to prevent unauthorized utilization of a STB (Column 1, lines 52-60) as disclosed by Safadi. Therefore, it would have been obvious at the time the invention was made to Shintani to include a firewall in communication with the STB's interface to the Internet (Column 2, lines 54-57, Column 10, lines 20-24), to necessarily receive communications from the STB's interface and to filter received information (Column 5, lines 36-50) as taught by Coss in order to facilitate parental control of Internet of video access in the home (Column 10, lines 25-27) as disclosed by Coss.

Regarding Claim 8, Shintani, Nissimov, Safadi and Coss disclose all the limitations of Claim 7. Coss discloses packet filtering (Column 5, lines 36-50).

Regarding Claim 9, Shintani, Nissimov, Safadi and Coss disclose all the limitations of Claim 7. Coss discloses the firewall including a proxy service (Column 8, lines 57-67, Column 9, lines 1-26, Figure 10A, Figure 10B).

Regarding Claim 10, Shintani, Nissimov, Safadi and Coss disclose all the limitations of Claim 7. Coss discloses the firewall includes a stateful inspection (Column 5, lines 36-50).

Regarding Claims 12, Shintani, Nissimov, Safadi and Coss disclose all the limitations of Claim 7. Shintani discloses that the STB can receive information from

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service provider headend via DSL or modem over the Internet or the second communication network (Page 2, paragraph 0021). Safadi discloses a user processor or remote resource manager (RRM) and that the RRM is capable of receiving instructions (Column 9, lines 53-65).

Regarding Claim 14, Shintani, Nissimov, Safadi and Coss disclose all the limitations of Claim 13. Shintani discloses an MPEG decoder (Figure 2, 122).

Regarding Claim 15, Shintani, Nissimov, Safadi and Coss disclose all the limitations of Claim 13. Safadi discloses the STB have a RRM or user processor (Column 9, lines 30-52).

Regarding Claim 17, Shintani, Nissimov, Safadi and Coss disclose all the limitations of Claim 15. Safadi discloses that the user processor or remote resource manager is capable of sending information regarding resources associated with the STB (Column 9, lines 31-52).

12. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani in view of Nissimov, Safadi and Coss as applied to claim 7 above, and further in view of del Val et al (US 6,128,653 and hereafter referred to as "Val").

Regarding Claims 11, Shintani, Nissimov, Safadi and Coss disclose all the limitations of Claim 7. Coss discloses that the firewall is resident in the STB (Column 10, lines 20-24). Coss discloses that the firewall analyzes data arriving in communications protocols such as Internet protocol (IP), transmission control protocol (TCP) or universal datagram protocol (UDP) (Column 5, lines 59-64). Shintani,

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Nissimov, Safadi and Coss are silent on firewall capable of analyzing information formatted in a communications protocol. Val discloses a system in which client computer requests information from a server (Figure 1). Val discloses that the firewall can block protocols transmitted from the server to the client computer (Column 5, lines 13-15, Figure 4, Column 8, lines 45-49), which reads on the firewall analyzing information formatted in the protocol. Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to Shintani in view of Nissimov, Safadi and Coss the firewall capable of analyzing information formatted in a communications protocol (Column 5, lines 13-15, Figure 4, Column 8, lines 45-49) as taught by Val in order to improve communications in client server architectures (Column 1, lines 53-58) as disclosed by Val.

13. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani in view of Nissimov, Safadi and Coss as applied to claim 7 and 13 above, and further in view of Feigen et al (US 2002/0138554 and hereafter referred to as "Fei").

Regarding Claim 16, Shintani, Nissimov, Safadi and Coss disclose all the limitations of Claim 15. Safadi discloses the processor causes operating instructions to be communicated to the STB as the processor performs the comparison and then sends the status to the MSO/headend to communicate operating instructions to the STB (Column 9, lines 53-65) to stop services. Fei discloses a STB or remote device (Page 1, paragraph 0009), which receives communications from a network host (Figure 2, 204). Fei discloses the host notifies the remote device to reconcile discrepancies

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between the host and the STB or fixing the code of the software at the STB or terminating the remote device's access to services (Page 2, paragraph 0016) or modifying a configuration of the STB. Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to Shintani in view of Nissimov, Safadi and Coss include host notifies the remote device to reconcile discrepancies between the host and the STB or fixing the code of the software at the STB or terminating the remote device's access to services or modifying a configuration of the STB (Page 2, paragraph 0016) as taught by Fei in order to mitigate unauthorized tampering of the system (Page 1, paragraph 0003) as disclosed by Fei.

14. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feigen et al (US 6,925,566 and hereafter referred to as "Feigen") in view of Bruynsteen et al (US 6,658,663 and hereafter referred to as "Bru").

Regarding Claim 18, Feigen discloses a method of initiating communications between a STB or remote unit (Figure 1, 14, Column 3, lines 18-20) and a service provider (Figure 2, Column 6, lines 53-67, Column 7, lines 1-6); receiving resource information associated with a STB describing any addressable memory and its range or space or capacity (Column 6, lines 53-67, Column 7, lines 1-6, 26-43); detecting unauthorized modifications to the STB when the resource information differs from the configuration information (Column 7, lines 26-43, Column 5, lines 33-55). Microsoft's Computer Dictionary (4th edition) defines memory a device where information can be stored and retrieved and in the most general sense memory can refer to disk drives.

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Feigen is silent on memory comprising disk drive. Levin discloses set top box (STB) (Figure 1, 102, Column 2, line 34) a method of communicating between a STB and a service provider (Figure 1, Column 3, lines 56-60) and STB has a disk drive or HDD (Figure 1, 108, Column 2, line 45), which has storage capacity which described by the controller (Column 3, lines 34-60). Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Feigen to include that memory can include a disk drive (Figure 1, 108, Column 2, line 45) as taught by Bru in order to provide a faster high-capacity storage unit which can store more data.

Regarding Claim 19, Feigen and Bru disclose all the limitations of Claim 18.

Feigen discloses communicating data from network host to STB (Column 6, lines 53-67, Column 7, lines 1-6, 26-43).

Regarding Claim 20, Feigen and Bru disclose all the limitations of Claim 18.

Feigen disclose communicating operating instructions to the STB to perform more interrogations or further investigation (Column 4, lines 41-47, Column 5, lines 39-40).

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farzana E. Hossain whose telephone number is 571-272-5943. The examiner can normally be reached on Monday to Friday 8:00 am to 4:30 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FEH

September 14, 2006


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